WHAT IS CLAIMED IS:

1. An optical information reading apparatus comprising:

an illumination optical system for projecting illumination light, elongated in a read width direction, onto an object of reading, said illumination optical system including an illumination light source made using an LED and illumination lens means made to output light incident thereon from said illumination light source while condensing and/or diffusing the incident light; and

a light-receiving optical system including a light-receiving sensor for receiving light reflected from said object of reading,

said illumination lens means including a multi-tiered lens unit in which a plurality of concave lens tiers and a plurality of convex lens tiers are alternately disposed in succession in said read width direction and a rod-like lens unit for condensing said illumination light in a direction perpendicular to said read width direction, with said multi-tiered lens unit and said rod-like lens unit being formed integrally with each other.

2. The apparatus according to claim 1, wherein the optical axis of said illumination light and the optical axis of said light-receiving optical system are optically disposed on the same plane.

3. The apparatus according to claim 1, wherein

said illumination lens means is made such that its peripheral portion and its central side portion in said read width direction differ in optical characteristic from each other so that said peripheral portion has a light diffusion range smaller than that of said central side portion.

4. The apparatus according to claim 3, wherein, in said illumination lens means, said multi-tiered lens unit is made such that its radius of curvature varies

between said peripheral portion and said central side portion to produce the different optical characteristics.

5. The apparatus according to claim 3, wherein, in said illumination lens means, said rod-like lens unit is formed to have a curved surface in said read width direction for producing the different optical characteristics.

6. The apparatus according to claim 1, further comprising a guide optical system including a guide light source for emitting laser light and a guide lens for spreading light emitted from said guide light source in said read width direction, and said guide lens is formed integrally with said illumination lens means.

7. The apparatus according to claim 1, wherein two illumination optical systems are used as said illumination optical system and disposed symmetrically with respect to said light-receiving optical system, and said illumination lens means of the symmetrically disposed illumination optical systems are integrally connected to each other through a connection portion which does not function as a lens.